

## HEALTHY CHAIR

### BACKGROUND OF THE INVENTION

#### 5 1. Field of the Invention

The present invention relates to a healthy chair, particularly to a healthy chair which helps to attain a better sitting position, to straighten the spine and to relax.

#### 10 2. Description of Related Art

The present inventor in fifteen years of experience of healing by massage has discovered a method for eliminating gluing together of muscle tissue or swollen ligaments by correcting the sitting position. In daily life, among 15 standing, sitting and lying, sitting is the most unstable position of the human body. Therefore, a good sitting position helps to eliminate gluing together of muscle tissue or swollen ligaments.

In the human body, muscles and tissues are distributed 20 and balanced around a central vertical line, being arranged in eight vertical sections: (1) above the cervical vertebrae, (2) above the shoulders, (3) above the ribs, (4) above the hip, (5) above the buttocks, (6) above the knees, (7) above 25 the toes, and (8) below the toes. Thus the whole body gains softness and flexibility.

In complex daily life and with psychic changes, certain 30 vertical sections of the human body lose balance and have to rely on other sections up to a point of becoming wound up and entangled, as viewed from a vertical perspective, so that diseases develop.

The human body has a three-dimensional structure with a surface that is held together by surface forces, with forces acting between diagonally opposed points, e.g., from the left half of the upper body to the right upper arm, the right lower arm and the left half of the belly to the right lower arm and the right hip, and from the right rear neck to the left forehead.

For balancing under gravitation, the upper body has five sections, with points of application of forces naturally arranged in a zig-zag pattern. Fig. 5A shows points of application of forces as circles and directions of forces as dashed lines, forming the zig-zag pattern. The larger angles between neighboring lines of forces become, the smaller are lever arms and, consequently, exerted torques.

Therefore, sitting in a position that comes close to a standing position has a strong influence on angles of lines of forces in the Z-shaped pattern and on the values of forces.

For the balance of the various parts of the human body, like neck, upper body, belly and hip, lumbar vertebrae are of decisive importance. In today's office work, sitting positions are usually characterized by a forward inclined upper body, with the belly staying in an original position, so that the lower arms are placed before the hip and even before the thighs, resulting in angles of lines of forces in the Z-shaped pattern that are larger than in a traditional upright sitting position. Furthermore, the angles between thigh and belly and the angles between calves and feet let forces at joints become smaller, while forces at the belly become larger, generating tension in the abdominal region.

Conventional chairs mostly have backrests for

positioning the upper body. Thereby, angles of lines of forces in the Z-shaped pattern tend to be too small, resulting in too large torques, which possibly leads to gluing together of muscle tissue and swollen ligaments, even to failure of the nervous system.

## SUMMARY OF THE INVENTION

It is an object of the present invention to provide a healthy chair which helps to improve the sitting position and to straighten the spine.

Another object of the present invention is to provide a healthy chair which improves health and slims the belly.

The present invention can be more fully understood by reference to the following description and accompanying drawings.

## DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

The healthy chair of the present invention comprises: a seat plate 1, having an inclined orientation; several feet, mounted on a lower side of the seat plate 1; a positioning bar, extending away from the seat plate 1 in an upper-forward direction and having a far end in a fixed position; and a support bar, mounted on rear ends of the feet. Sitting on the healthy chair of the present invention results in an upright position of the upper body brought about without voluntary action and prevents the upper body from being inclined too far. In particular, the support bar prevents the body from inclining forward and helps to relax feet and toes, so that an easing and healthy effect on the body is achieved.

As shown in Fig. 1, in a first embodiment of the healthy chair of the present invention, on the lower side of the seat plate 1 a foot assembly 2 is mounted in an X-shaped pattern, consisting of a two feet 21 and two feet 22. The

two feet 21 have lower ends reaching to a rear side and being connected by a connecting bar 4. The connecting bar 4 has two ends respectively extending beyond the two feet 21 forming support bars 41. The seat plate 1 has a rear side from which an L-shaped positioning bar 3 extends forward and upward, ending in a horizontal end 31.

Sitting on a regular chair has the thighs and the lower part of the upper body enclose an angle of 90 degrees or less, generating inner pressure inside the body. Sitting on the seat plate 1, however, results in the thighs being inclined downward, so that the thighs and the lower part of the upper body enclose an angle of more than 90 degrees, providing a relaxed feeling inside the body. With the feet in addition placed on the support bar, sitting at ease every day for half an hour not only helps to attain a better sitting position and straightening of the spine, but also better health for the body. Preferably the seat plate 1 has an inclination angle of 12 - 15 degrees, as shown in Fig. 4, with the positioning bar 3 leaning against the lower part of the upper body.

Referring to Figs. 3 - 4, the present invention in a second embodiment has two relatively short feet 21a, mounted on the seat plate 1 at a front side thereof, and two relatively long feet 22a, mounted on the seat plate 1 at a rear side thereof. The two relatively long feet 22a are connected by a support bar 4a.

Referring to Fig. 5, the present invention in a third embodiment has a connecting bar 4a mounted between the two relatively long feet 22a, which extends beyond the two relatively long feet 22a, forming support bars 41a.

As shown in Fig. 5A, when using the healthy chair of the present invention, the upper body and the ground enclose an angle of about 85 degrees, with the thighs and the lower part of the upper body enclosing an angle of more than 90 degrees, the feet resting on the support bars 41a so that the toes point approximately downward.

Referring now to Fig. 6, the present invention in a fourth embodiment has a foot assembly 2b in an X-shaped pattern mounted on the lower side of the seat plate 1 and having a relatively large width. A support bar 4b is placed between rear lower ends of the foot assembly 2b. A positioning bar 3b is mounted on the seat plate 1, having a left extension bar 31b, a right extension bar 33b and a connecting rod 32b connecting the left and right extension bars 31b, 33b. The connecting rod 32b has one hingedly attached end and one free end that can be fastened and released, or has two ends that can be fastened and released. This is conventional art and does not need to be explained further.

Referring to Fig. 7, the present invention in a fifth embodiment has a positioning device 3c consisting of a belt 31c with a female buckle half and a belt 32c with a male buckle half, further shown in Fig. 8. Alternatively, as shown in Fig. 9, a positioning device 3d with belts 31d, 32d having bur-like latches is provided.

Referring to Fig. 10, the present invention in a sixth embodiment has a positioning device 3e consisting of a belt 31e with a free end to which a fastening element 32e is attached. The fastening element 32e has a T-shaped opening 33e. A positioning element 34a is fixed on the seat plate 1, having a T-shaped pin 35a over which the fastening element 32e is

put for fastening the positioning device 3e.

Referring to Fig. 10, the present invention in a seventh embodiment has a positioning device 3f consisting of a vertical part 31f mounted on said front side of said seat plate and a horizontal extension piece 32f set on said vertical tube 31f on an upper end thereof.

While the invention has been described with reference to preferred embodiments thereof, it is to be understood that modifications or variations may be easily made without departing from the spirit of this invention which is defined by the appended claims.

#### BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 is a perspective view of the healthy chair of the present invention in the first embodiment.

Fig. 2 is a side view of the healthy chair of the present invention in the first embodiment.

Fig. 3 is a perspective view of the healthy chair of the present invention in the second embodiment.

Fig. 4 is a side view of the healthy chair of the present invention in the second embodiment.

Fig. 5 is a perspective view of the healthy chair of the present invention in the third embodiment.

Fig. 5A is a schematic illustration of the use of the present invention.

Fig. 6 is a perspective view of the healthy chair of the present invention in the fourth embodiment.

Fig. 7 is a perspective view of the healthy chair of the present invention in the fifth embodiment.

Fig. 8 is a schematic illustration of the buckle halves of the present invention in the fifth embodiment.

Fig. 9 is a schematic illustration of the belts of the present invention in the fifth embodiment provided with bur-like latches.

Fig. 10 is a perspective view of the healthy chair of the present invention in the sixth embodiment.

Fig. 11 is a perspective view of the healthy chair of the present invention in the seventh embodiment.